

WHAT IS CLAIMED IS:

1. A navigation device comprising:

present position calculating means for calculating present position information of a subject device;

road determining means for determining a feature of a road on which the subject device is currently traveling according to map data;

communication means for transmitting discrimination information for discriminating said subject device and said present position information to an external server and for receiving proximity information on another device from said server according to said feature of the road; and

display means for displaying the proximity information on the other device which is received from said server.

2. The navigation device according to claim 1, wherein when said road determining means determines that the road on which the subject device is traveling is the road that is low in visibility, the communication means transmits said discrimination information and the present position information to said server.

3. The navigation device according to claim 1, wherein said present position information that is transmitted by the communication means includes orientation information and velocity information.

4. The navigation device according to claim 2, wherein said present position information that is transmitted by the communication means includes orientation information and

velocity information.

5. The navigation device according to claim 3 or 4, wherein said present position information that is transmitted by the communication means includes error information of at least one of the position information, the orientation information and the velocity information.

6. The navigation device according to claim 1, wherein said present position information that is transmitted by the communication means includes destination spot information.

7. The navigation device according to claim 1, wherein said communication means uses mobile communication that enables packet communication.

8. The navigation device according to claim 1, further comprising route guidance means for searching a place at which the subject device can cross said other device from map data and guides a user to the place when receiving the proximity information on the other device from said server.

9. The navigation device according to claim 8, wherein when the route guidance means searches said crossable place, the route guidance means takes into consideration at least one of a travel direction, a distance to the crossable place from the subject vehicle, and a total of turn and twist angles as a parameter.

10. A server comprising:

communication means for communicating with a plurality of navigation devices described in claim 1; and

proximity information preparing means which receives

discrimination information and present position information from said plurality of navigation devices for preparing proximity information indicative of the possibility that a specific navigation device crosses another navigation device on the basis of the discrimination information and the present position information of said plurality of navigation devices to transmit the proximity information to said specific navigation device.

11. The server according to claim 10, wherein said proximity information preparing means processes, by priority, reception from the navigation device that is high in a predetermined priority.

12. A proximity information display method, comprising:
calculating present position information of a subject device;

determining a type of a road on which the subject device is traveling according to map data;

transmitting discrimination information for discriminating said subject device and said present position information to an external server;

receiving proximity information on another device from said server;

searching a place at which the subject device can cross the other device from the map data when receiving the proximity information on said other device from said server; and

displaying said searched crossable place together with the proximity information on said other device on the map.

13. A navigation device comprising:

present position calculating means for calculating present position information on a subject vehicle;

road determining means for determining a feature of a road on which the subject vehicle is currently traveling according to map data;

communication means for transmitting discrimination information for discriminating said subject device and the present position information on said subject device to another device and for receiving discrimination information for discriminating said other device and the present position information on said other device from said other device in the case where the road determining means determines that the feature of the road is a road having an adverse condition; and

display means for displaying the present position information on said other device that is received from said other device.

14. The navigation device according to claim 13, wherein said present position information that is transmitted by the communication means includes orientation information and velocity information.

15. The navigation device according to claim 14, wherein said present position information that is transmitted by the communication means includes error information of at least one of the position information, the orientation information and the velocity information.

16. The navigation device according to claim 13, wherein

said present position information that is transmitted by the communication means includes destination spot information.

17. The navigation device according to claim 13, wherein said communication means uses mobile communication that enables packet communication.

18. The navigation device according to claim 13, further comprising route guidance means for searching a place at which the subject device can cross said other device from map data and guides a user to the place when receiving the present position information of said other device.

19. The navigation device according to claim 18, wherein when the route guidance means searches said crossable place, the route guidance means takes into consideration at least one of a travel direction, a distance to the crossable place from the subject vehicle, and a total of turn and twist angles as a parameter.